

IN THE CLAIMS:

1 8. (currently amended) A rotor for an electric rotary machine comprising:
2 a rotor yoke having a cylindrical peripheral wall with a first axial end and a
3 second axial end opposite the first axial end, a bottom wall provided integrally with
4 said peripheral wall so as to close the first axial end of said peripheral wall, and a
5 boss provided at a central portion of said bottom wall for mounting a rotary shaft,
6 said peripheral wall further comprising an inner surface and an outer surface, and a
7 protrusion means formed on said outer surface; and
8 an inductor forming member fitted onto the outer surface of said peripheral
9 wall, said inductor forming member having a ring-like portion and inductor magnetic
10 poles formed on an outer surface of said ring-like portion and an inner surface of
11 said ring-like portion fitted against the outer surface of said peripheral wall of the
12 rotor yoke, said ring-like portion having a first axial end and a second axial end
13 opposite the first axial end of the ring-like portion,
14 wherein said protrusion means is located against the first axial end of said
15 ring-like portion and the second axial end of said ring-like portion when said ring-like
16 portion is fitted against said peripheral wall of the rotor yoke.

1 9. (previously added) A rotor for an electric rotary machine as set forth in
2 claim 8, wherein said protrusion means comprises at least one embossed portion
3 extending from the peripheral wall of said rotor yoke, wherein said embossed portion
4 is located against the first axial and the second axial end of said ring-like portion
5 when said ring-like portion is fitted against said peripheral wall of the rotor yoke.

1 10. (currently amended) A rotor for an electric rotary machine comprising
2 a rotor yoke having a cylindrical peripheral wall with a first axial end and a
3 second axial end opposite the first axial end, a bottom wall provided integrally with
4 said peripheral wall so as to close the first axial end of said peripheral wall, and a
5 boss provided at a central portion of said bottom wall for mounting a rotary shaft,
6 said peripheral wall further comprises an inner surface and an outer surface,
7 at least one first outer peripheral area of a first outside diameter, at least one second
8 outer peripheral area of a second outside diameter smaller than said first outer
9 peripheral area with a shoulder extending in a radial direction from said second outer
10 peripheral area to first outer peripheral area, and at least one third outer peripheral
11 area of a third outside diameter smaller than said second outer peripheral area with

at least one protrusion projecting from the peripheral wall between said second outer peripheral area and said third outer peripheral area, said first outer peripheral area, said second outer peripheral area, and said third outer peripheral area provided sequential in order in an axial direction of said rotor yoke; and

an inductor forming member fitted onto the outer surface of said peripheral wall, said inductor forming member having a ring-like portion and inductor magnetic poles formed on an outer surface of said ring-like portion, said ring-like portion having a first axial end and a second axial end opposite the first axial end of the ring-like portion, and an inner surface of said ring-like portion fitted against the outer surface of said peripheral wall of the rotor yoke,

wherein said shoulder is located against the first axial end of said ring-like portion and said protrusion is against the second end of the ring-like portion when said ring-like portion is fitted against said peripheral wall of the rotor yoke.

11. (currently amended) A rotor for an electric rotary machine comprising:

a rotor yoke having a cylindrical peripheral wall with a first axial end and a second axial end opposite the first axial end, a bottom wall provided integrally with said peripheral wall so as to close the first axial end of said peripheral wall, and a boss provided at a central portion of said bottom wall for mounting a rotary shaft, and

an inductor forming member fitted onto the outer surface of said peripheral wall, said inductor forming member having a ring-like portion and inductor magnetic poles formed on an outer surface of said ring-like portion, said ring-like portion having a first axial end and a second axial end opposite the first axial end of the ring-like portion, and an inner surface of said ring-like portion fitted against the outer surface of said peripheral wall of the rotor yoke,

said peripheral wall further comprises an inner surface and an outer surface and at least one protrusion on the outer surface of the peripheral wall, said protrusion including a first protrusion portion extending in an axial direction of said rotor yoke and a second protrusion portion extending in a circumferential direction of said rotor yoke at a first end of said first protrusion portion, said first protrusion portion including a projection extending from a second end of said first protrusion portion,

said inner surface of said ring-like portion further comprising at least one recess corresponding to each first protrusion portion so that each first protrusion portion is engaged with a corresponding recess,

wherein said second protrusion portion is located against the first axial end of

24 said ring-like portion and said projection is against the second axial end of the ring-
25 like portion when said ring-like portion is fitted against said peripheral wall of the
26 rotor yoke.

1 12. (previously added) A rotor for an electric rotary machine as set forth in
2 claim 11, wherein said second protrusion portion is integrally formed with said first
3 protrusion portion so that said protrusion is T-shaped.

1 13. (currently amended) A rotor for an electric rotary machine comprising
2 a rotor yoke having a cylindrical peripheral wall with a first axial end and a
3 second axial end opposite the first axial end, a bottom wall provided integrally with
4 said peripheral wall so as to close the first axial end of said peripheral wall, and a
5 boss provided at a central portion of said bottom wall for mounting a rotary shaft,
6 and

7 an inductor forming member fitted onto the outer surface of said peripheral
8 wall, said inductor forming member having a ring-like portion and inductor magnetic
9 poles formed on an outer surface of said ring-like portion, said ring-like portion
10 having a first axial end and a second axial end opposite the first axial end of the
11 ring-like portion, and an inner surface of said ring-like portion fitted against the outer
12 surface of said peripheral wall of the rotor yoke,

13 said peripheral wall further comprises an inner surface and an outer surface
14 and at least one protrusion on the outer surface of the peripheral wall, said
15 protrusion having a pair of protrusion portions extending in an axial direction of said
16 peripheral wall, said pair being located faced to each other at a distance slightly
17 larger than an axial size of said ring-like portion,

18 said inner surface of said ring-like portion further comprising at least one
19 recess corresponding to each protrusion so that each protrusion is engaged with a
20 corresponding recess,

21 wherein said pair is located against the first axial end of said ring-like portion
22 and the second axial end of the ring-like portion when said ring-like portion is fitted
23 against said peripheral wall of the rotor yoke.

1 14. (previously added) A rotor for an electric rotary machine as set forth in
2 either of claims 8, 9, 10, 11, 12, and 13, wherein a permanent magnet forming a
3 magnetic field system is mounted on the inner surface of said peripheral wall of said
4 rotor yoke.